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Comparative Adoption and Contextualisation of Competency-Based Curricula: Evidence from Kenya, Rwanda, and Tanzania (2020-2025)

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ABSTRACT

Since the mid-2010s, Kenya, Rwanda, and Tanzania have pursued ambitious competency-based curriculum (CBC) reforms, a major break with traditional content-based education systems. The reforms are designed to prepare learners with 21st-century skills such as critical thinking, creativity, communication, and digital literacy. This paper presents a rigorous comparative examination of how these three East African countries have implemented, adapted, and contextualized CBC reforms throughout the critical implementation period of 2020-2025. We review implementation mechanisms, early outcomes, equity considerations, and contextual factors influencing reform trajectories by conducting a systematic review of policy documents, government reports, evaluation studies, and peer-reviewed research published between 2020-2025. Although the three countries have comparable competency frameworks and pedagogical aspirations, implementation varies greatly. Rwanda exhibits centralized, orderly implementation and high policy coherence; Kenya experiences political competition and infrastructure bottlenecks despite well-established policy platforms; Tanzania engages in gradual integration with an emphasis on local adjustment. Teacher capacity gaps, assessment system inertia, resource constraints, and ongoing equity divides are common challenges. This discussion indicates that the potential of CBC is still conditional on the need to resolve systemic implementation bottlenecks, especially teacher professional development, assessment capacity, financing sustainability, and specific equity interventions. The transformative potential of CBC requires regional collaboration and evidence-based policy realignment.

INTRODUCTION

The 21st century has seen the world move beyond traditional knowledge-transmission paradigms of education to competency-based models that focus on the practice of knowledge, skills, and attitudes in real-world situations (UNESCO, 2017a). Competency-Based Curriculum (CBC) is a pedagogical philosophy based on constructivist learning theory, focusing on learner-centred

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teaching, formative assessment, and development of transferable competencies rather than memorization of content. This paradigm shift is a reaction to the swiftly evolving labour markets, technological upheaval, and the realization that education should equip learners not only to memorize but also to think critically, solve complex problems, work in teams, and adjust to changing conditions. CBC is distinguished by a variety of central characteristics such as clear learning outcomes in the form of demonstrable competencies, student-centred pedagogies that focus on active learning and inquiry, ongoing formative assessment to inform learning, flexible progression based on competency mastery instead of seat time, and the combination of academic, technical, and socio-emotional domains of learning.

The cases of Kenya, Rwanda and Tanzania offer interesting examples in comparative analysis of CBC adoption and implementation. The three East African countries are geographically close, belong to regional economic blocs, and face similar development issues such as high population growth, urbanization, and ambitions to move away to knowledge-based economies. In all three countries, education is placed at the core of national development strategies, and governments invest in ambitious reforms despite severe resource limitations (Republic of Rwanda, 2021; World Bank, 2022). The time and reason behind CBC uptake have both similarities and significant differences. In 2017, Kenya implemented its CBC, substituting the 8-4-4 system due to the perceived pressure on exams, inadequate development of practical skills, and mismatch with labour market requirements (Government of Kenya, 2023).

In 2015, Rwanda initiated CBC development as part of overall education sector transformation following Vision 2020/2050 and post-1994 genocide recovery (Rwanda Education Board, 2020). In 2016, Tanzania began competency-based reforms on the basis of previous curriculum reviews and in response to ongoing learning quality issues (Komba & Shukia, 2023). Each of the three reforms reached their critical implementation stage in 2020-2025, a year also characterized by the COVID-19 pandemic disrupting education systems.

Although the world has shown increasing interest in CBC reforms, there is limited rigorous comparative evidence on how it has been implemented in sub-Saharan African settings. The available literature is mostly policy-design-oriented, small-scale studies with limited generalizability, or earlier than the intensive implementation phase starting in 2020 (Kimario & Otieno, 2022; Muchira et al., 2023). The COVID-19 pandemic essentially destabilized education systems in 2020-2021, posing unprecedented implementation challenges but also driving innovations in remote learning, teacher support, and community engagement. The period of recovery after the pandemic is correlated with critical points of CBC implementation in all three countries, but no systematic comparative analysis of this turning point has been conducted.

This paper fills these gaps by synthesizing the best available evidence between 2020-2025 in policy documents, government reviews, multilateral agency reports, and peer-reviewed studies. We leave the policy rhetoric to consider implementation mechanisms, initial outcome evidence, equity implications, and the political-economic factors influencing reform trajectories. The paper's comparative approach illuminates not only what is being attempted but why implementation succeeds or struggles in different contexts, offering actionable insights for strengthening CBC reforms regionally and globally.

Conceptual Framework for Analysing CBC Implementation

Competency-Based Curriculum is a radical redefinition of educational purpose, pedagogy, and assessment. Fundamentally, CBC conceptualizes learning as manifested in demonstrable competencies, defined as integrated constellations of knowledge, skills, attitudes and values that learners can practice in real-life settings, as opposed to coverage of prescribed content (UNESCO, 2017a, 2017b). This outcome-

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based model focuses on what learners are capable of doing with what they have learned as opposed to what they have been taught. In theory, CBC relies on constructivist learning theories that prioritize active knowledge construction, social learning, and the significance of authentic tasks and context. Competency frameworks generally include cognitive competencies (critical thinking, problem-solving, and creativity), interpersonal competencies (communication, collaboration, and empathy), and intrapersonal competencies (self-regulation, persistence, and metacognition). The discourse of 21st-century skills, including the 4Cs of critical thinking, creativity, communication, and collaboration, has a strong impact on the modern CBC design as it embodies the beliefs regarding skills needed to succeed in knowledge economies and democratic societies (Komba & Shukia, 2023; Thornhill-Miller et al., 2023).

To organize our comparative analysis, we use a multi-dimensional framework that encapsulates essential aspects of CBC implementation. The initial dimension relates to policy design and legal underpinning, which explores the legislative and policy foundations of CBC such as curriculum frameworks, competency descriptors, learning area organization, progression models, and alignment with wider education and development strategies (Ministry of Education Kenya, 2023; State Department for Basic Education Kenya, 2023). The second-dimension deals with curriculum architecture, the structural organization of learning in terms of grade organization, learning areas and subjects, time allocation, progression pathways, and articulation across levels of education. The third critical dimension is assessment and accountability systems, which involve frameworks and instruments of assessing competency development, such as formative and summative assessment methods, national exams, school-based assessments, reporting systems, and quality assurance mechanisms (KNEC, 2023). The fourth dimension is teacher capacity and professional development, which explores pre-service preparation, and in-service professional development to competency-based pedagogy, training models, coverage, duration, quality, and follow-up support. The fifth dimension is resource mobilization and instructional materials, which explore the availability, quality, and distribution of textbooks, teacher guides, digital resources, laboratory equipment, and other materials needed to support competency-based learning. The sixth dimension is equity and inclusion mechanisms that look at explicit provisions and implementation strategies to make sure CBC is beneficial to all learners despite gender, socioeconomic status, geographic location, language, disability, and other possible sources of disadvantage (KNEC, 2023; Ngaruiya, 2023). Lastly, governance and stakeholder engagement looks at the institutional arrangements of CBC coordination, decision-making, monitoring, and accountability, and the mechanisms to engage teachers, parents, communities, civil society, and private sector.

CBC implementation is not a vacuum but is deeply influenced by contextual factors that facilitate or limit reform success. Political economy factors such as the allocation of political power, policy persistence across regimes, central government strength, teacher union influence, and general governance quality all influence CBC implementation patterns (Bavugempore & Ngabonziza, 2024; Government of Kenya, 2023). The scope and depth of reform are critically determined by financing patterns and donor influence, such as budget allocations to education in the domestic budget, the level and modalities of external development assistance, and the sustainability of financing after initial implementation (Rwanda Education Board, 2020; World Bank, 2022). The characteristics of teacher workforce such as teacher supply and deployment patterns, qualification levels, salary and incentive structure, professional culture, and collective organization affect receptivity to pedagogical change and implementation capacity (Halimani et al., 2024; Karua et al., 2025). The legacies of the education system such as existing infrastructure, class sizes, assessment practices, societal trust in examinations, past-reform experiences, and organizational cultures provide path dependencies

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that new reforms must negotiate. Lastly, EdTech infrastructure and preparedness, including access to electricity, internet connectivity, digital devices, technical support, and digital literacy among teachers and learners influence opportunities in technology-enhanced learning that is core to many CBC visions (Eden et al., 2024; Karua et al., 2025; Khan et al., 2025). This framework will inform our country analyses and comparative synthesis, allowing us to systematically examine implementation along shared dimensions and to be attentive to contextual specificity that informs reform trajectories.

KENYA

Policy Ambition and Implementation Challenges

The Competency-Based Curriculum in Kenya was the result of a popular discontent with the 8-4-4 education system that was implemented in 1985 and is criticized as overemphasizing examination performance, encouraging rote learning, providing little development of practical skills, and producing graduates who were ill-equipped to meet the demands of the labour market or entrepreneurship (Muchira et al., 2023; Ruth, 2020; Wanyama, 2025). As a result of comprehensive consultations, the Kenya Institute of Curriculum Development modelled CBC to focus on holistic learner development, both in cognitive, psychomotor, and affective domains. The CBC framework is based on legal foundations such as the amendments to the Basic Education Act and the statutory mandate of KICD to develop the curriculum, which introduced a new 2-6-3-3 structure of 2 years pre-primary, 6 years primary, 3 years junior secondary, and 3 years senior secondary education (KCID, 2017; State Department for Basic Education Kenya, 2023). The CBC of Kenya describes seven essential competencies such as communication and collaboration, critical thinking and problem-solving, imagination and creativity, citizenship, digital literacy, learning to learn, and self-efficacy, which are not taught as separate subjects but developed over time in all learning domains. CBC proposes three career pathways at senior secondary level: STEM, Social Sciences, and Arts and Sports Science, which are designed to enable learners to specialize based on interests and aptitudes.

It was implemented starting in January 2017 with pre-primary and Grade 1, with further cohorts joining annually, with upper primary completion by 2022 and the critical Junior Secondary Education transition in 2023 (Ministry of Education Kenya, 2023; State Department for Basic Education Kenya, 2023). This shift was both controversial and logistically complex, with problems such as insufficient infrastructure, issues with teacher deployment, and confusion among the population about JSE placement. In January 2023, the Ministry of Education released Guidelines for Implementation of Junior Secondary Education, which tried to clarify expectations, although implementation remained uneven across counties (Ministry of Education Kenya, 2023; State Department for Basic Education Kenya, 2023). The 2023 Presidential Working Party on Education Reform proposed major recalibrations such as a review of the 2-6-3-3 structure, rationalization of learning areas, and changes to examination and progression policies, with the 2024 Sessional Paper introducing further policy changes and creating continued uncertainty about the ultimate form of CBC (Government of Kenya, 2023; Ministry of Education Kenya, 2023). This reform-on-reform situation has left teachers, parents, and education managers confused, eroding confidence and making planning difficult.

The most important implementation factor in CBC is widely considered to be teacher capacity, and the Teacher Service Commission and KICD coordinate in-service training programs, mainly through cascade models where master trainers train regional trainers who in turn train school-level teachers (Halimani et al., 2024; Joseph et al., 2025). Training is usually a series of brief workshops on CBC philosophy, competency-based pedagogy, lesson planning, and assessment practices. Numerous reports record severe shortcomings in teacher preparedness, with Muchira et al. (2023) revealing that numerous

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educators had limited knowledge of competency-based pedagogy and were unable to implement CBC principles in the classroom. Teachers cited lack of training time, lack of follow up, and excessive demands to adopt new assessment practices and keep large classes and heavy teaching loads. Studies by Karua et al. (2025) also reported the concerns of teachers regarding insufficient preparation to meet CBC assessment requirements, especially continuous assessment and portfolio management. UNESCO-IICBA coordination with the TSC and KICD in Kenya has supported the incorporation of teacher well-being and competency-based strategies, acknowledging that teacher stress and burnout compromise the quality of implementation (Halimani et al., 2024; Joseph et al., 2025). Yet these efforts only extend to a small proportion of the Kenyan population of about 300,000 teachers, and the cascade training system is subject to some degree of quality degradation as the training is transmitted through successive levels (Halimani et al., 2024; Muchunguh, 2024).

In 2021, the Kenya National Examinations Council published a Competency-Based Assessment Framework that describes principles and strategies of assessing competency development, focusing on continuous formative assessment, authentic performance tasks, rubric-based assessment, and learner portfolios as key assessment methods (Aengwo & Thamarasseri, 2024; KNEC, 2023). Nonetheless, this assessment vision has been very difficult to implement, with teachers raising concerns regarding the workload implications of continuous assessment especially in cases of large class size that may be over 40-60 students. Assessment literacy, meaning knowledge of how to design valid performance tasks, develop and use rubrics, provide formative feedback, and utilize assessment data to inform instruction, is lacking in many teachers, and without proper training and support resources, teachers tend to resort to familiar paper-and-pencil tests that emphasize knowledge recall as opposed to competency demonstration (Karua et al., 2025; Muchira et al., 2023). The core of the CBC vision, portfolio assessment, has been poorly understood and inconsistently applied, and teachers have had problems with what to include, how to arrange and store portfolios, and how to use them to assess and communicate with parents. The move to Junior Secondary in 2023 revealed a lack of readiness in assessment systems, as JSE assessment frameworks and tools were not developed on time, leaving teachers unsure of what to expect, and the debate about terminal examinations causing anxiety among parents and teachers socialised in an examination-driven system where the examination culture is still deeply ingrained (Atieno, 2025; Kamau, 2022).

There are still issues of material availability with significant differences among counties and between public and private schools, with many public schools in arid and semi-arid counties and urban informal settlements having inadequate textbook-to-learner ratios (Atieno, 2025; World Bank, 2022). The cost of textbooks continues to represent a substantial financial burden to low-income households even with government subsidies, and the Kenya Education Cloud, developed to store digital learning materials, is confined to device access and internet connectivity in cities and economically privileged regions. Learner-disabled resources such as Braille textbooks, large print, assistive technologies, and adapted equipment are grossly inadequate. The 2023 shift to Junior Secondary revealed critical infrastructure shortages, as most primary schools had inadequate facilities such as science laboratories, technical workshops, home science rooms and adequate classrooms to accommodate the JSE curriculum, and secondary schools admitting JSE learners suddenly experienced overcrowding (State Department for Basic Education Kenya, 2023; Streamline Official, 2025). Infrastructure expansion capital investments were far behind enrolment demands, and the distribution of teachers posed further problems since JSE needs subject-specialist teachers, not primary generalist teachers, but supply of specialists especially in sciences, mathematics and technical subjects was not sufficient.

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Kenya is characterized by strong geographic disparities in education access and achievement, with urban counties, especially Nairobi, enjoying significantly superior schooling facilities, access to qualified teachers, teaching materials, and community services to support learning than rural counties, especially arid and semi-arid areas with overcrowded schools, multi-grade instruction, teacher shortages, and deficient supplies (World Bank, 2022). CBC implementation has probably widened these inequities, and not narrowed them because of the resource-intensive demands such as various learning resources, project materials, access to technology, and well-equipped teachers are more prevalent in urban and economically advantaged schools. Small schools in rural areas find it difficult to apply the activity-based methods of CBC when they do not have access to basic materials, when there are too many students in one classroom to provide each with personal attention, and when the teachers themselves are poorly supported. Although the CBC design in Kenya incorporates gender-responsive pedagogy principles and policy commitment to inclusive education, the reality of implementation falls far behind policy expectations of learners with disabilities who experience severe deficits of specialized teachers, assistive technologies, adapted materials, and accessible infrastructure (Muchira et al., 2023; Ruth, 2020; Wanyama, 2025). Socioeconomic barriers are essential because poverty is a serious barrier to education access and quality, and CBC uses practical, activity-based learning that needs materials such as art supplies, science equipment, sports materials, and digital technologies, which many poor families cannot afford.

RWANDA

Structured Implementation in a Centralized System

The Competence-Based Curriculum of Rwanda was created in response to the post-genocide reconstruction and development strategy of knowledge economy transformation, with the Rwanda Education Board spearheading comprehensive curriculum reform starting in 2015 to replace content-heavy, examination-focused models with competence-based learning in line with Vision 2020 and Vision 2050 (Republic of Rwanda, 2021; Rwanda Education Board, 2020). The education sector strategic plans incorporate CBC as a core reform with a solid legal and policy base, and the creation of REB as a specialized agency under the mandate of the Ministry of Education to develop curriculum, teacher professional development, national examinations, and quality assurance of education facilitates policy consistency and coordinated action in contrast to more fragmented governance elsewhere. Education in Rwanda is based on a 6-3-3 system with 6 years of primary education, 3 years of lower secondary education, and 3 years of upper secondary education, with CBC implemented grade-by-grade starting with Primary 1 in 2016, followed by full primary implementation by 2021 and secondary implementation in the 2020-2025 period (Republic of Rwanda, 2021; Rwanda Education Board, 2020). The competency framework focuses on critical thinking, creativity, communication, cooperation, and lifelong learning that are built across all subjects rather than taught in isolation, and learning progressions are carefully defined using competency descriptors at each grade level that indicate what a learner should know, skills, and attitudes (Rwanda Education Board, 2020).

CBC is directly aligned as the human capital developer needed to achieve knowledge economy goals in Rwanda, and Vision 2050 aims to make Rwanda an upper-middle-income nation based on ICT-driven growth, innovation, and regional leadership (Republic of Rwanda, 2021; Sibomana et al., 2025). Education is regarded as being a cornerstone of this change, and CBC is intended to generate graduates capable of working and citizenship in the 21st century. The emphasis on STEM is especially high based on national priorities in the fields of technology, innovation, and industrialization, whereas digital literacy is a core competency with investments in ICT infrastructure and digital learning consistent with curriculum objectives. CBC also incorporates peace education, social cohesion and civic

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responsibility that are essential in post-genocide settings where education is a nation-building and social reconstruction goal (Mugiraneza, 2021; Sibomana et al., 2025). The trilingual policy of Rwanda, which includes Kinyarwanda as the national language, English as the medium of instruction and international language, and French as the third language presents both opportunities and challenges to the CBC implementation, with the post-genocide transition of French-to-English as primary medium of instruction starting in 2009 aligning Rwanda with the East African Community and creating challenges as many teachers were French-educated (Bavugempore & Ngabonziza, 2024).

Rwanda implemented systematic, centralized rollout strategy, with the start of CBC implementation of Primary 1 in 2016 and the addition of new grades annually, with all primary grades under CBC completed by 2022 and full system coverage by 2024 (Mugiraneza, 2021; Rwanda Education Board, 2020). This grade-by-grade system enables gradual teacher training, materials development, and system revision of early implementation experience, with the REB coordinating implementation via provincial and district education systems with articulate accountability lines between central policy and classroom practice. Frequent monitoring and reporting cycles keep track of implementation progress, bottlenecks, and inform adjustments. The unique aspect of the Rwanda experience is its wholesome Teacher Training College (TTC)curriculum overhaul in alignment with CBC via the TTC Curriculum Framework 2020 reorganization of pre-service teacher preparation around competence-based pedagogy, so that new teachers enter the workforce with the knowledge and skills to implement CBC (Republic of Rwanda, 2021; Rwanda Education Board, 2020). TTC reform focuses on real-world teaching experience with longer school-based practicum and mentorship by seasoned teachers, incorporating special needs education and inclusive pedagogy into primary TTC curriculum to equip all teachers with various learners, and balancing subject specialization with development of pedagogical competence especially in formative assessment, differentiated instruction, and learner-centred facilitation.

In-service teachers who had been trained according to the old curriculum, Rwanda developed structured continuous professional development systems with school-based professional development coordinated through sector and district education offices with subject-specific training modules, lesson study, and peer observation (Iwasaki et al., 2015; Republic of Rwanda, 2021; Uworwabayeho et al., 2020). Head teachers are trained as instructional leaders to facilitate CBC implementation in their schools, and REB works on standardized training module and materials to guarantee uniformity and quality nationwide. An organized, monitored implementation is monitored by district education officers and sector education inspectors, a contrast to more flexible in-service training elsewhere. The assessment framework in Rwanda focuses on competence demonstration using both formative and summative assessment with guidelines and tools designed by REB such as rubrics, performance tasks, and portfolio assessment strategies correlated with competency descriptors. The policy emphasis on formative assessment is strong and teachers are expected to provide regular feedback that guides the learner progress, but the national exams at Primary 6, Secondary 3, and Secondary 6 are more of a tradition than what the CBC assessment vision suggests, which can create tension between the assessment philosophy and the examination tradition (Republic of Rwanda, 2021; Uworwabayeho et al., 2020).

The literature on CBC preparedness among Rwandan teachers demonstrates a mixed effect, with TTC graduates demonstrating better preparedness than teachers trained through the previous system, indicating that competence-based pedagogy and on-the-job training through TTC reform seem to have a positive effect, though the samples are limited, and long-term outcomes remain unclear (Nshimiyimana & Andala, 2024). A 2024 study investigating the impact of competence-based curriculum implementation on mathematics achievement in Rwamagana District

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reported positive but small student achievement gains, which authors attributed to teacher training and instructional strategies that focused more on problem-solving and application than rote calculation, though effects were modest and varied significantly across schools depending on teacher quality and school resources (Nshimiyimana & Andala, 2024). The Forward-Looking Joint Review of the education sector in Rwanda in 2021/22 offered thorough evaluation of these areas of progress and challenges, with CBC as the key policy milestone and structured rollout, teacher training, and materials development, with implementation gaps needing attention such as ongoing quality concerns despite access improvements, teacher capacity being a constraint with in-service teachers needing significant further professional development, system alignment with CBC being incomplete, equity gaps continuing with rural and disadvantaged students receiving lower quality implementation, and the challenge of sustainable financing as education sector relies on external funding to fund

Rwanda reports significant urban-rural differences in the quality of CBC implementation, with Kigali and other urban centres reporting a higher quality of school infrastructure, access to qualified teachers, instructional resources, internet connectivity, and community resources than rural schools, especially in isolated areas with infrastructure deficits, teacher shortages, limited materials, and low internet access (Republic of Rwanda, 2021; Rwanda Education Board, 2020; Sibomana et al., 2025). Government policies are trying to equalize with capitation grants, resource distribution targets and incentives to teach in rural areas, and boarding schools typical in Rwanda partially offset the rural disadvantage by offering accommodation, meals and concentrated educational facilities, but boarding school expenses place financial strains on the poorest families. Rwanda has a high national dedication to gender equality in education policy and CBC design, and girls education programs are linked to CBC implementation and gender parity in primary school enrolment, though secondary retention of girls is a concern and dropout rates associated with early pregnancy and marriage, expected domestic work, and poor menstrual health management in schools (Bavugempore & Ngabonziza, 2024). In CBC, inclusion education is a policy commitment across districts and special needs schools, but the reality of implementation is dismal with shortages of specialized teachers, insufficient adapted materials, inadequate assistive technology, and many schools lacking physical access (Bavugempore & Ngabonziza, 2024). The policy of English-medium instruction poses equity problems because urban middle-class students tend to have greater exposure to English than students in rural areas, whose native languages are Kinyarwanda and whose exposure to English is limited, especially when school instruction moves entirely to English in upper primary schools and secondary schools.

TANZANIA

Gradual Integration and Local Adaptation

In 2016, Tanzania implemented changes in its curriculum by introducing competency-based reforms as part of continuous education policy development in reaction to long-running issues about the quality of learning; even with high primary enrolment following the abolition of fees in 2001, learning assessments indicated that many students were leaving primary with low literacy, numeracy, and problem-solving skills (Educate Tanzania, 2025; Kasuga & Kalolo, 2025; Komba & Shukia, 2023). CBC reforms based on the Education and Training Policy of 2014 highlighted quality education leading to competent, creative, and productive citizens, and the strategy adopted by Tanzania to implement changes differed with Kenya and Rwanda by focusing on gradual integration of competences into current curriculum framework instead of wholesale system restructuring, reflecting political caution, resource limitations, and experience with reform efforts in developing countries that rapid change can be risky (Kasuga & Kalolo, 2025; Komba & Shukia, 2023). Legal

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authorities sanctioning CBC involve the Education and Training Policy and Basic Education Act, where the Tanzania Institute of Education under the Ministry of Education, Science and Technology plays the central role in formulating, permitting, producing teacher guides and supporting curriculum execution. The education system in Tanzania is a 2-7-4-2-3+ system with 2 years of pre-primary, 7 years primary, 4 years O-level secondary, 2 years A-level secondary, and 3+ years tertiary education, with the structure remaining intact but competency-based approaches being overlaid onto existing subject syllabi and progression models instead of implementing radical structural change as in Kenya (Komba & Shukia, 2023; Nkya, 2021; Nzima, 2016).

CBC, as articulated by Tanzania, focuses on the core competencies of communication, numeracy, critical thinking and problem-solving, creativity and innovation, digital literacy, and life skills such as personal management, entrepreneurship, and citizenship, which are to be developed within all subjects and not taught as discrete courses (Komba & Shukia, 2023; Nkya, 2021). Subject-specific competencies are framed within the overall competence model, with learning outcomes per standard and subject defined in terms of observable performance, not content coverage. Nonetheless, when analysing in 2023 the integration of 21st-century skills into the basic education curriculum in Tanzania, the RISE Programme concluded that skills are discussed in curriculum documents; however, operationalization is weak, and skills do not have clear pedagogical models, assessment frameworks, and practical instructions on how to develop and assess competencies (Educate Tanzania, 2025; Kasuga & Kalolo, 2025; Komba & Shukia, 2023). The analysis methodically reviewed the extent to which critical thinking, collaboration, communication, and creativity are integrated throughout the curriculum in Tanzania, revealing little consideration of how competencies develop across grades in more complex ways, enough specification of teaching methods necessary to develop competencies, and little guidance on how to assess competencies, with assessment mostly remaining content-based.

In Tanzania, primary education is delivered in Kiswahili, a national language and mother tongue of most but not all Tanzanians, which may support understanding, precision, and access equity because it is commonly spoken and understood throughout the country (Assey, 2022; Educate Tanzania, 2025; Kimario & Otieno, 2022). But secondary education transits to English medium introducing linguistic discontinuity wherein students are suddenly expected to learn more complicated subject matter in less familiar language influencing learning quality and understanding, and this transition problem is particularly acute among rural students who have minimal exposure to English. Primary level CBC materials are designed to support accessibility, often using Kiswahili, even though limited English teacher proficiency occasionally limits their ability to transition students to English-based secondary education. The rollout of CBC in Tanzania involved a phased implementation starting with Standards I and V in 2016, with more standards added to all primary levels and lower secondary forms introduced over the 2020-2025 period, but the implementation rates varied by region and school depending on capacity, resources, and local prioritization (Assey, 2022; Kimario & Otieno, 2022). The less centralized government of Tanzania than Rwanda implies that regional and district education authorities are more autonomous in their implementation, which provides them room to adapt locally and innovate but also increases the likelihood of inconsistency and variability in quality.

TIE organizes national training on CBC to work with regional and district education offices and teacher resource centres, and training is usually based on a cascade model, allowing reaching large audiences but with a cost of message dilution and loss of quality in successive layers of training (Assey, 2022; Kimario & Otieno, 2022). Subject-specific workshops emphasize competency-based pedagogy, activity-based instruction, ongoing assessment, and lesson design, but training time is usually minimal at 3-5 days inadequate to effect

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long-lasting pedagogical change. Most teachers are only provided with follow-up support through a one-off training and no follow-up school-based assistance; teacher resource centres are found in districts that theoretically could offer ongoing professional development and support but the effectiveness of these centres can vary dramatically depending on resources and leadership. Teachers indicate that training is beneficial but would prefer more such as increased length of training, greater number of practical examples and demonstration lessons, ability to practice with feedback, and continuous support over one-time training, with most teachers feeling unprepared to meet CBC requirements, especially assessment (Kimario & Otieno, 2022).

National examinations in Standard VII at primary leaving, Form IV at O-level, and Form VI at A-level are conducted by the National Examinations Council of Tanzania; CBC policy highlights the transition to competency assessment, including continuous formative assessment, but not examination-based (Kimario & Otieno, 2022; Nzima, 2016). Nonetheless, policy intentions are lagged by the reality that continuous assessment guidelines have been published but quality implementation is hindered by teacher capacity and workload constraints, and continuous assessment has often become frequent testing instead of formative assessment influencing learning. Teachers have time, resources, and training to engage in authentic performance assessment, develop rubrics, and provide formative feedback, and national examinations increasingly include competency-based tasks such as problem situations, application questions, and analysis questions even though examinations are still heavily content-focused. Teacher assessment literacy is described as critical capacity gap because the majority of teachers were schooled in examination-based system and trained to teach to cover content, and transitioning to competency-based assessment entails potentially radically different sense of assessment purpose and practice that many teachers cannot develop without deep professional learning (Kasuga & Kalolo, 2025; Nkya, 2021; Nzima, 2016).

Empirical research investigating how CBC influences student achievement in Tanzania is developing yet limited, with studies in Arusha and Mtama regions by Kimario and colleagues examining the impact of competency-based teaching strategies on student achievement showing small positive correlations with competency-based tasks such as problem-solving, application, and analysis relative to traditional teaching methods that emphasize memorization (Kimario & Otieno, 2022; Majiwa et al., 2025; Shiboko & Mrema, 2024). Learners who received instruction via activity-based, learner-centred methods showed more favourable critical thinking and capacity to use knowledge in new situations, but the improvement in foundational skills such as reading fluency and simple arithmetic was less significant, leading to the question of whether CBC effectively serves in attaining basics and establishing higher-order skills. Literature also reported significant havoc heterogeneity across schools, with CBC implementation in schools where teachers were well prepared, materials available, and strong leadership were linked to learning gains, whereas under-resourced schools that employed minimally-trained teachers and had poor materials yielded poor implementation and poor learning results, indicating CBC implementation potential is tightly coupled with the quality of implementation provisioning that many Tanzanian schools failed to offer (Assey, 2022; Kimario & Otieno, 2022).

Educational resources and educational results in Tanzania are highly differentiated between urban and rural areas with a huge urban-rural gap, with urban schools being better built, better equipped with qualified teachers, enough materials, power, and even internet whereas rural schools are in poor condition with frequent teacher absence, severe material lack, and lack of connectivity (Komba & Shukia, 2023; Majiwa et al., 2025; Nkya, 2021). These differences are necessarily reflected in CBC implementation because urban schools can use activity-based learning with the right materials and the rural schools cannot, because the unhappy urban teachers have more access to professional development opportunities

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and the unhappy rural teachers go to school less or do not go to school at all because of distance and cost, and because urban students have educated parents to support learning and rural students often have parents with low literacy and no resources to buy to support learning. Schools that are remote and inaccessible are most affected because schools that can only be reached through hard-to-reach methods especially during rainy seasons receive supplies late and infrequently, education officers and support providers rarely visit them, and teachers are particularly hard to attract and retain. Gender parity in primary enrolment has achieved nearly equal access of both boys and girls in Tanzania, but secondary retention has not yet achieved the same, with girls being more likely to drop out than boys as a result of early pregnancy and marriage, domestic work expectations, and limited financial means with families favouring boys education over girls (Assey, 2022; Nkya, 2021). CBC has a policy commitment to inclusive education but the reality of implementation is abysmal with hardships such as shortages of specialized teachers, lack of access to adapted materials, physical access barriers with most of the schools not physically accessible and the gap in assessments and lingering stigma with low expectations among some educators, peers and communities.

COMPARATIVE ANALYSIS

Although Kenya, Rwanda, and Tanzania present strikingly similar versions of core competency frameworks focusing on critical thinking, creativity, communication, collaboration, and digital literacy as reflections of global discourse disseminated by international organizations and regional networks, implementation drastically varies depending on governance structures, resource availability, teacher capacity, and contextual factors (Government of Kenya, 2023; Komba & Shukia, 2023; Nshimiyimana & Andala, 2024). Rwanda exhibits the best policy coherence and institutional coordination with the consolidated power of REB over TTC pre-service reform portraying the systematic investment in future teacher capacity unavailable in Kenya and Tanzania, and centralized governance that facilitates consistent messaging and resource allocation but may limit local adjustment (Republic of Rwanda, 2021; Rwanda Education Board, 2020). Kenya has the most ambitious structural reform using the 2-6-3-3 system but also most political contestation and uncertainty, with robust technical capacity, notably through KICD and KNEC, contrasting with poor teacher support systems and infrastructure, and multiple revisions, such as the Presidential Working Party recommendations and the Sessional Paper indicating responsiveness to concerns but disrupting implementation with the JSE transition crisis being a paradigmatic case of high ambition without sufficient preparation (Government of Kenya, 2023; State Department for Basic Education Kenya, 2023). Tanzania follows the more careful incremental path that may restrict transformation but also evade certain political risks and implementation anarchy in Kenya by applying the principle, wherein decentralized governance ensures space to innovate locally but may introduce inconsistency and quality variance, where limited financing and capacity limit comprehensiveness of implementation but bottom-up innovations demonstrate agency and adaptation (Assey, 2022; Kimario & Otieno, 2022; Komba & Shukia, 2023).

The main approach to in-service professional development used in all three countries allows scale but dilutes the quality of professional development, but there are significant differences: Kenya uses the TSC-KICD with UNESCO-IICBA coordination, Rwanda uses the comprehensive TTC reform that systematically prepares newly qualified teachers to work in CBC, and Tanzania uses the TIE with variable teacher resource centre effectiveness (Halimani et al., 2024; Kimario & Otieno, 2022; Rwanda Education Board, 2020). This dichotomy becomes vital between pre-service and in-service focus because Rwanda has invested the most systematic effort in pre-service reform to secure future teacher provision on CBC despite in-service teachers still needing capacity building, and Kenya and Tanzania have lagged in pre-service teacher education reform with teacher training

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colleges and university education programs still preparing teachers to teach curricula that no longer exist (Karua et al., 2025; Muchira et al., 2023; Rwanda Education Board, 2020). No single country has had comprehensive high-quality professional growth to all teachers with the necessary intensity and follow-up support, with frequent gaps in this context including inadequate length as brief workshops permit only superficial introduction, limited follow-up as most teachers have one training session but lack long-term school-based support, cascade dilution as the message of training degrades over successive layers, insufficient practical focus as training often focuses on theory and lacks opportunities to provide tangible examples and practice, and inconsistent facilitator quality (Karua et al., 2025; Muchira et al., 2023).

Assessment is the most frontier of CBC implementation in all three countries, with all officially prioritizing the role of formative assessment over traditional summative examination dominance, but the reality of implementation reveals that, despite official focus on quality formative assessment, summative emphasis continues to dominate in these countries as teachers grapple to find the time and resources to implement quality formative assessment (Kasuga & Kalolo, 2025; KNEC, 2023; Komba & Shukia, 2023; Republic of Rwanda, 2021). Continuous assessment is sometimes referred to as frequent testing as opposed to formative feedback, and high-stakes summative exams persist in shaping accountability that puts pressure on teaching to tests instead of building out broader competencies. The KNEC created a detailed CBA Framework of a major technical success but scaled implementation is still under development with JSE transition exposing assessment system shortcomings (KNEC, 2023; Muchira et al., 2023). REB in Rwanda integrates curriculum, assessment, and quality assurance functions that allow an increase in policy coherence with assessment framework and instruments built on national examinations, but otherwise, reform is slow (Republic of Rwanda, 2021; Rwanda Education Board, 2020). Tanzania NECTA (National Examinations Council of Tanzania) progressively reforms national exams with more application items and traditional content recall but transformation is sluggish and teacher capacity to deliver quality school-based assessment is low (Kimario & Otieno, 2022; Komba & Shukia, 2023).

The availability of textbooks is also highly uneven in and between countries, with KICD in Kenya approving textbooks created by publishers but the government capitation is inadequate and families pay a lot, creating severe urban-rural and wealth-based inequalities (Muchira et al., 2023; World Bank, 2022). The government is centralizing textbooks supply in Rwanda with REB authoring, approving, and procuring so that every school had access to the materials but remote area distribution logistics is problematic and a more equitable approach than user-pay models (Republic of Rwanda, 2021; Rwanda Education Board, 2020). Textbook availability in Tanzania is a critical issue especially in rural areas where government capitation is inadequate and families buy what they can afford or go without, which essentially means that textbook-student ratios in many schools are one to five or worse and some schools have no textbooks at all, which fundamentally hampers CBC implementation (Kasuga & Kalolo, 2025; Kimario & Otieno, 2022; Komba & Shukia, 2023). Kenya has most built EdTech ecosystem with Kenya Education Cloud and increasing device coverage in urban centres but with extreme digital divide, Rwanda prioritizes ICT infrastructure with vision of knowledge economy making gradual progress though urban-rural digital divide remains, and Tanzania has least integrated EdTech with most schools lacking electricity and internet connectivity and realistic technology strategies focusing on radio and printed materials before considering computer access (Komba & Shukia, 2023; Muchira et al., 2023; Republic of Rwanda, 2021).

Evidence of implementation, although CBC is often touted as a solution to inequalities, in fact exacerbates them, show that although inclusive education of learners with disabilities, gender-

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responsive pedagogy, consideration of marginalized groups, and equitable distribution of resources are explicitly provided in the CBC policy documents of all three countries, the test does not support what is claimed to be achieved in practice (Bavugempore & Ngabonziza, 2024; Komba & Shukia, 2023; Muchira et al., 2023). Geographic inequities demonstrate an urban school implementing CBC with larger resources, ready teachers, sufficient infrastructure, and supportive conditions whereas rural and remote schools are experiencing dire resource shortages, teacher shortages, insufficient infrastructure, and low support, and the resource-intensive nature of CBC only adds to urban-rural inequity, not alleviating it (Kimario & Otieno, 2022; Republic of Rwanda, 2021; World Bank, 2022).

Wealth-based inequities exist as affluent families can access richer schools either in the private or well-funded public, buy extra resources, offer home learning assistance, and absorb costs of enrichment opportunities when poor families fail to cover CBC-associated expenses, offer sufficient home assistance, or attend good schools, breaking equity promises without equitable public funding (Assey, 2022; Bavugempore & Ngabonziza, 2024; Muchira et al., 2023). Inclusive education policies still result in significant implementation deficits among learners with disabilities because most schools in all three countries do not employ specialized teachers, do not have modified materials, lack accessible infrastructure, and many learners with disabilities are out of school or do not attend school meaningfully (Kasuga & Kalolo, 2025; Ngaruiya, 2023; Nshimiyimana & Andala, 2024).

The ongoing disparities between CBC policy intentions and implementation realities are not due to poor policy design but to several interrelated factors. Policy-practice disconnect happens when curriculum policy designed centrally by technical experts often with international consultant advice is informed by global best practice, but policy developers have limited knowledge of the implementation context, such as actual school conditions, teacher capacity and limits, resource availability, and community expectations, leading to unrealistic expectations such as competency-based pedagogy with 60-100-student classes, continuous formative assessment without decreasing teacher workload, activity-based learning without sufficient materials, and technology integration without electricity and connectivity (Karua et al., 2025; Muchira et al., 2023). Human capacity limitations are reflected in the fact that the majority of teachers were trained on content-based examination-oriented teaching and do not have a deep grasp of competency-based pedagogy and assessment where short workshops do not give sufficient preparation to make a fundamental pedagogical shift, and head teachers, district education officers, and ministry officials also lacks the capacity to support the quality of implementation (Halimani et al., 2024; Karua et al., 2025; Kimario & Otieno, 2022; Muchira et al., 2023).

Financial capacity is inefficient because CBC is resource-intensive and demands various materials, specialized infrastructure, continuous professional growth, and assessment systems that lack sufficient funding, and sustainable funding needs substantial domestic funding, enhancing the efficiency, and decreasing donor dependence (Kasuga & Kalolo, 2025; Komba & Shukia, 2023; Republic of Rwanda, 2021; World Bank, 2022). The inadequacy of infrastructure capacity, such as overcrowded classrooms, absence of specialized rooms, insufficient furniture, and missing utilities, are fundamental to the subpar learning conditions and demand significant capital investment that is not within the budgetary capacity of the education sector (Kimario & Otieno, 2022; Republic of Rwanda, 2021). The reasons behind resistance to pedagogical change include entrenched teaching practice, rooted in the own schooling experience, teacher training, school culture, and accountability in exams, and the need to fundamentally rethink teaching that must be challenging and personal and professional change meets resistance on multiple fronts including anxiety about new practices, the perception of devaluation of current expertise, realism about coping with changed practices with large classes

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and limited resources, and scepticism about changed practices based on past failed experiences of reform.

Recommendations for Policy and Practice

Upon this comparative assessment, we offer country-specific and regional suggestions on how to reinforce the practice of CBC. In the case of Kenya, the initial priority is to stabilize the CBC policy framework by committing to policy stability over a specified time to allow implementation consolidation, making future revisions evidence-based refinements rather than radical redesign, and an independent curriculum advisory body with a variety of stakeholders would provide continuity during political transitions (Government of Kenya, 2023; State Department for Basic Education Kenya, 2023). Second, Kenya must invest in long-term teacher professional development by moving beyond workshop cascade model to school-based strategies, which use instructional coaches, establishing teacher learning communities in all schools with dedicated time to collaborative planning and peer observation, building head teacher capacity as instructional leaders, and offering practical resources such as lesson exemplars and assessment tools (Halimani et al., 2024; Karua et al., 2025; Muchira et al., 2023). Third, a KNEC acceleration of assessment system capacity needs KNEC to accelerate the development of validated competency-based assessment instruments, invest in teacher assessment literacy through intensive practical professional development, pilot portfolio and performance-based assessment with rigorous evaluation, and transform national examinations progressively and yet maintain public trust (KNEC, 2023; Muchira et al., 2023). Fourth, under-resourced counties should receive targeted equity financing, with more funds per student in disadvantaged districts, establishing special equity funds on CBC materials and teacher assistance in marginalized districts, and tracking the quality of implementation with accountability to close disparity. Fifth, enhancing parent and community involvement involves designing user-friendly communication materials about CBC, conducting regular school-community meetings, educating teachers about family engagement tactics, and developing parent-learning resources.

In the case of Rwanda, the priority should be to scale up successful TTC models to in-service teacher development through adaptation of TTC methods such as practical focus, extended practice, and mentorship to in-service programs, intensive programs based on deep training over 6-12 months part-time, and less reliance on short workshops (Republic of Rwanda, 2021; Rwanda Education Board, 2020). Second, improving language teaching resources in local languages needs more Kinyarwanda resources especially at the lower grades, bilingual materials that support gradual English-speaking acquisition, investment in teacher English language acquisition, and re-evaluation of language policy that balances the benefits of mother-tongue with those of English. Third, to support bottom-up feedback mechanisms, systematic channels where teachers and school leaders can give feedback on implementation and hold regular pulse checks to identify emerging issues, provide safe spaces where honest feedback is welcome, and show responsiveness through acting on feedback will have to be strengthened (Republic of Rwanda, 2021). Fourth, to scale up special needs education services, it is necessary to dramatically increase special teacher training, to scale up investment in adapted materials and assistive technologies, to provide resource teachers and support personnel in schools with learners with disabilities, and to enhance early identification and intervention systems. Fifth, to build sustainable financing beyond donor reliance, it is essential to elevate domestic financing budgetary allocation over time, enhance efficiency by enhancing financial management, create diversified financing with new mechanisms, and collaborate with donors on phase-out plans.

In the case of Tanzania, the priority should be to scale teacher in-service training by adding capacity and coverage beyond small samples to system-wide coverage, extending training time to deep learning, strengthening teacher resource

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centres through staffing and materials, and providing follow-up after workshops on a school scale. Second, to enhance TIE capacity, it is necessary to invest in human resources through hiring technical specialists, augmenting capabilities to create practical implementation resources, enhancing provincial and district presence, and enhancing coordination with NECTA regarding assessment alignment. Third, constructing strong formative assessment instruments and training necessitates the creation of validated practical assessment tools, intensive assessment literacy professional development, the creation of assessment resource repositories, and the incorporation of assessment into pre-service preparation. Fourth, to resolve the issue of resource disparities between regions, it will be necessary to implement progressive capitation formulas that allocate more per student to disadvantaged regions, emphasize remote regions in the distribution of textbooks, invest in infrastructure, especially rural regions, and incentivize teachers to work in hardship areas. Fifth, strengthening community ownership involves designing strategies of engagement in Kiswahili that suits low-literacy groups, applying community structures to CBC sensitization, establishing community roles in supporting schools, and illustrating the benefits of CBC to children and communities.

With regional coverage via the East African Community, we suggest initiating East African CBC knowledge exchange through the creation of online platform with hosting resources and discussion forums, annual regional implementation conference, practitioner exchange visitation, and regional comparative research. Second, to align assessment standards of regional labour mobility, regional competency frameworks should be developed defining core competencies, quality assurance procedures that ensure comparability across countries, mutual recognition of qualification mechanisms, and flexibility to suit national contexts but with minimum regional standards. Third, to coordinate donor engagement and prevent duplication, it is essential to create regional donor coordination mechanism, regional education sector plans, and motivate donors to fund regional priorities and share lessons on effective modalities of engagement across countries (Government of Kenya, 2023; Rwanda Education Board, 2020; World Bank, 2022). To the development partners, the advice would be to tie support to government-led reform timelines, invest in rigorous independent evaluation to enable stronger evidence base, support regional capacity building in curriculum development and assessment to reduce reliance on external consultants, and fund equity-focused implementation research that explores what works with marginalized populations.

Research Gaps and Future Directions

Although experience of implementation is increasing, there are significant knowledge gaps that do not allow evidence-informed policy, with the most significant gap being a lack of rigorous longitudinal data on learner outcomes following CBC because no baseline competency assessments prior to CBC prevent pre-post comparisons, the existing assessments measure traditional content mastery and not CBC competencies, small-scale studies provide suggestive evidence but not generalizability, and confounding factors such as COVID-19 learning losses and concurrent reforms complicate attribution (Kimario & Otieno, 2022; Muchira et al., 2023). There is an urgent need to conduct large-scale validated competency assessments that regularly track cohorts longitudinally and compare CBC students with relevant comparisons. The amounts of money are invested in teacher professional development, and there is low data on what strategies are the most effective relative to their costs, necessitating cost-effectiveness research comparing cascade and school-based models, duration and intensity effects, subject-specific versus general training, and pre-service versus in-service investment trade-offs (Halimani et al., 2024; Kimario & Otieno, 2022; Rwanda Education Board, 2020). Competency-based assessment tools are developed and in use with little evidence on

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validity and reliability, requiring psychometric research on whether assessments successfully measure intended competencies, reliability in different contexts and assessors, associations with traditional achievement metrics, and how they should be used and interpreted (KNEC, 2023; Komba & Shukia, 2023; Republic of Rwanda, 2021).

Limited studies de-escalate student-characterized CBC effects, studying disparate effects by socioeconomic status, geography, gender, disability, and language background, whether CBC mitigates or perpetuates inequalities, and by context of implementation serving different populations, and demand equity-centred studies to identify the impacts of CBC on marginalized groups in particular, and the factors that support equitable implementation. The bulk of the evidence on implementation consists of surveys and interviews with limited direct observation of the teaching practice, so large-scale classroom observation studies conducted using validated protocols are required to comprehend what actually occurs in CBC classrooms, how teaching practices differ across settings, what most effectively correlates with competency development, and how educators adapt CBC to their contexts, connecting teaching practices to student outcomes. There is significant paucity of systematic data on parent and community awareness, attitudes, and involvement in CBC, which necessitates surveys and qualitative studies involving a range of parents and community members especially those marginalized whose voices are not adequately represented, what parents know about CBC, and how these perceptions differ, how parents facilitate or obstruct implementation, and what methods of communication and engagement are most effective.

The current evidence base is subject to various methodological limitations such as excessive reliance on small, non-representative, non-randomized studies with convenience samples that lack generalizability, poor baseline data with no pre-CBC competency measurements to compare the results before and after, attributions issues because many changes take place simultaneously, and qualitative depth in studying implementation processes and contextual influences, and measurement because valid measurement of complex competencies is technically challenging with most current assessments measuring proxies or relying on self-reports (Muchira, 2023; Kimario, 20 These gaps necessitate two significant evaluation designs.

First, a multi-country longitudinal learning study tracking representative groups of students across a series of grades assessing competency development at regular intervals, representative sampling allowing robust cross-country comparable competency measures with context-adapted components, equity disaggregation oversampling marginalized populations, multiple outcomes measuring cognitive and interpersonal competencies and foundational skills, and contextual data on implementation quality enabling explanatory analysis, requiring substantial investment of about five to ten million dollars over five years with regional coordination through EAC or research consortium. Second, an implementation fidelity and teacher practice study that integrates classroom observation with validated protocols, teacher survey and interviews, document analysis, and student outcome measures, with stratified sampling of schools representing different contexts, validated observation instruments that capture key CBC practices, multiple observations of teachers over time, documentation of teacher CBC knowledge and support provided, analysis of student outcomes in observed classes to identify relationships between teaching practices and outcomes, and cross-country comparative component that identifies universal and context-specific patterns, has requirements of approximately three to five million dollars over three years with universities and research organizations serving as implementation partners

CONCLUSION

Kenya, Rwanda, and Tanzania embarked on ambitious competency-based curriculum reforms premised on transforming education from content

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transmission to competency development, better preparing learners for 21st-century demands, with the 2020-2025 period marking critical implementation phase revealing both promise and profound challenges of translating policy aspirations into classroom realities. This comparative analysis illuminates that while all three countries articulate remarkably similar competency frameworks reflecting global discourse influence, implementation diverges dramatically based on governance structures, resource availability, teacher capacity, and contextual factors, with Rwanda's centralized coordination enabling consistency, Kenya's ambitious restructuring generating political contestation and implementation chaos, and Tanzania's gradual integration reflecting cautious incrementalism constrained by severe resource limitations. Persistent gaps between policy intentions and implementation realities stem not primarily from poor policy design but from capacity constraints including inadequately prepared teachers and weak infrastructure, resource inadequacy including insufficient financing and material shortages, and contextual factors including examination cultures and stakeholder resistance.

Despite explicit equity commitments, implementation evidence reveals CBC often amplifies rather than reduces inequalities as resource-intensive requirements favour wealthy and urban populations while under-served communities receive degraded implementation, with learners with disabilities, rural students, and poor families facing multiple barriers CBC implementation inadequately addresses. Teacher preparedness and ongoing support emerge as most critical implementation factor across all countries, with Rwanda's TTC reform representing best practice investing in future teacher capacity though in-service development for current workforce lags everywhere, while misalignment between CBC curriculum and examination-focused assessment systems fundamentally undermines implementation as teachers rightfully prioritize what accountability systems measure. CBC is resource-intensive requiring materials, infrastructure, professional development, and assessment systems exceeding current financing levels, with all three countries relying substantially on donor support creating sustainability questions as donors emphasize transitions to domestic financing.

CBC's transformative promise of developing adaptable, creative, critically-thinking citizens and workers remains compelling, but realizing this promise is contingent on addressing systemic implementation bottlenecks identified in this analysis including dramatically strengthening teacher capacity through sustained practical professional development, transforming assessment systems to align with competency development, increasing equitable financing to adequate sustainable levels, ensuring marginalized populations receive implementation quality enabling competency development, and building implementation evidence base informing continuous improvement. Without confronting these challenges honestly and investing accordingly, CBC risks becoming another reform wave that passes leaving minimal lasting impact, a disappointing outcome given stakes for millions of children whose educational opportunities and life prospects depend on education systems delivering on reform promises. Success requires political will, adequate resources, sustained commitment, and realistic expectations about implementation timelines and complexity, with the path from policy to practice being long and difficult but navigable through commitment and learning from experience across countries enabling CBC's potential for transforming education and serving development goals to be progressively realized.

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